|  |  |
| --- | --- |
| Name two congruent angles in the diagram above AND the reason why. | because **vertical angles** are **congruent** |
| Name a pair of sides that are congruent to each other in the diagram above AND the reason why. | because it is a **shared side** between the two triangles. The **reflexive property** tells us that the side can be congruent to itself. |
| bisects . State the conclusion you can make AND the reason why. | because of the **definition of bisect**.  (Remember, **bisect** means to cut in half, so the line segment FH is cutting the angle GFI in two congruent parts) |
| *X* is the midpoint of . State the conclusion you can make AND the reason why. | because of the **definition of midpoint.**  (Remember, a midpoint divides a segment into two congruent parts.) |

|  |  |
| --- | --- |
| Name two congruent angles in the diagram above AND the reason why. | because **vertical angles** are **congruent** |
| State the **postulate** by which you know the two triangles are congruent. | SSS (Side Side Side) Postulate |
| State the **postulate** by which you know the two triangles are congruent. | SAS (Side Angle Side) Postulate |
| State the **postulate** by which you know the two triangles are congruent. | AAS (Angle Angle Side) Postulate |
| State the **postulate** by which you know the two triangles are congruent. | ASA (Angle Side Angle) Postulate |

|  |  |
| --- | --- |
| Macintosh HD:Users:rebeccarapoport:Desktop:Screen Shot 2016-01-04 at 8.49.30 PM.png  . State the conclusion you can make AND the reason why. The conclusion should be about ANGLES. | because they are **alternate interior angles** (remember… the lines are PARALLEL!) |
| State the **theorem** by which you know these two triangles are congruent. | **Hypotenuse-Leg Theorem (HL)**  If the hypotenuse and a leg of a right triangle are congruent to the hypotenuse and a leg of another right triangle then the triangles are congruent. |
| and  State the conclusion you can make AND the reason why. | Step 1: and are right angles because of the **definition of perpendicular** (remember the symbol means perpendicular)  Step 2: because **all right angles are congruent** |